

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P345080

Luminaire Tested: **24CZ-30SE-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1905-313-5)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-30SE-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2646.6 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

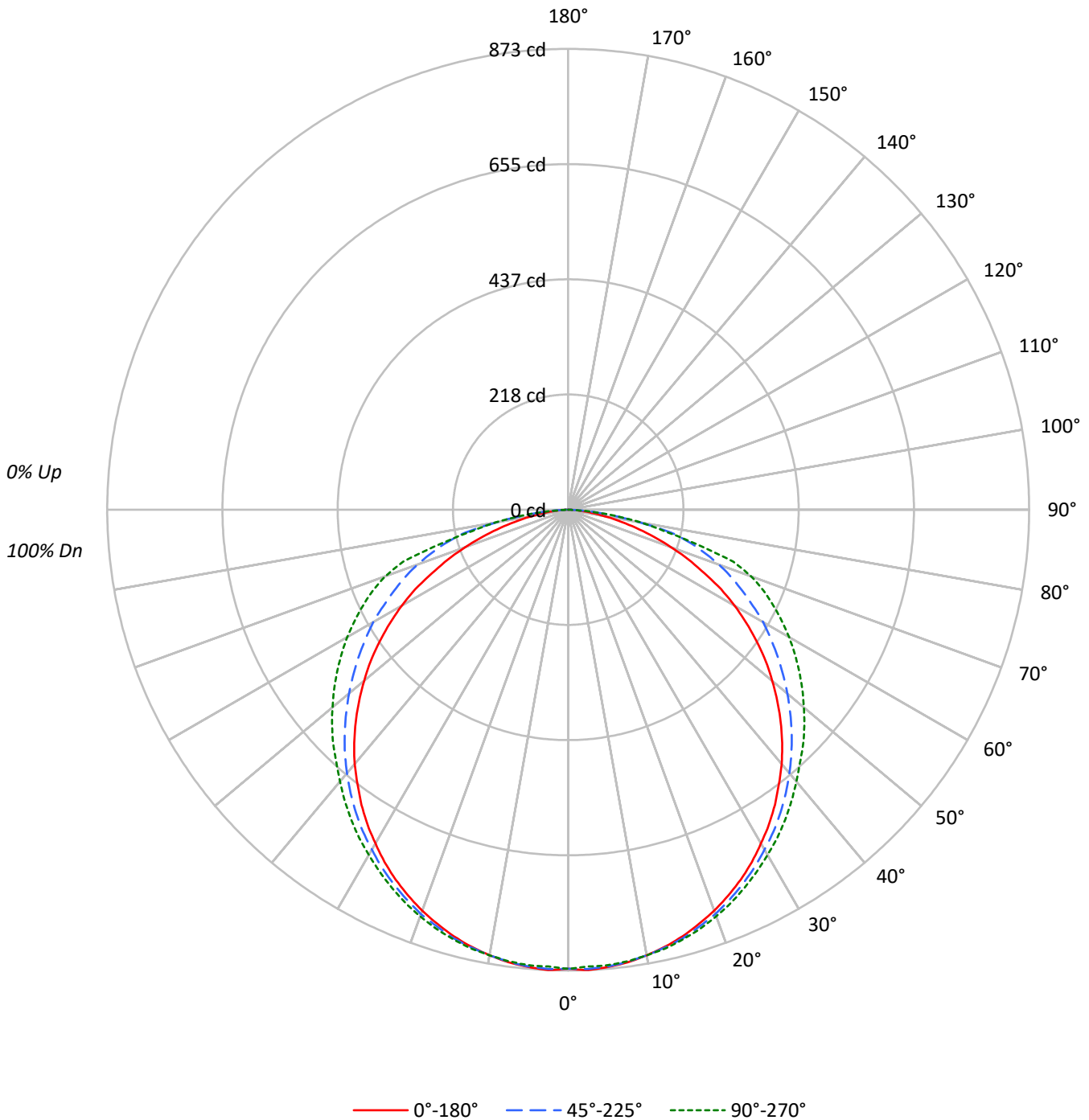
Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	74	81	76	72	77	74	70	68
3	89	78	70	63	86	76	69	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	52	65	58	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	45	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	41	34	48	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1170	1170	1170
5°	1175	1173	1170
10°	1171	1171	1171
15°	1165	1170	1173
20°	1157	1167	1174
25°	1148	1161	1173
30°	1134	1155	1173
35°	1121	1151	1177
40°	1105	1145	1181
45°	1083	1139	1197
50°	1056	1134	1220
55°	1024	1136	1253
60°	979	1147	1300
65°	906	1159	1365
70°	816	1195	1450
75°	689	1232	1297
80°	536	1054	1089
85°	384	718	630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	3.1
10°-20°	236.7	8.9
20°-30°	359.9	13.6
30°-40°	437.3	16.5
40°-50°	461.5	17.4
50°-60°	433.7	16.4
60°-70°	357.0	13.5
70°-80°	224.9	8.5
80°-90°	53.1	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	679.0	25.7
0°-40°	1116.3	42.2
0°-60°	2011.6	76.0
0°-90°	2646.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2646.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	870	870	870	870	870	
5°	870	865	868	867	866	83
15°	837	833	840	842	842	236
25°	773	772	782	787	790	356
35°	682	686	701	710	716	427
45°	569	578	599	616	629	439
55°	436	452	484	518	534	390
65°	285	312	364	410	429	283
75°	133	174	237	258	249	142
85°	25	42	46	43	41	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	869.6	869.6	869.6	869.6	869.6
2.5°	873.0	867.3	870.7	869.6	866.2
5°	869.6	865.0	868.4	867.3	866.2
7.5°	865.0	860.5	863.9	862.8	862.8
10°	857.1	853.7	857.1	857.1	857.1
12.5°	848.0	844.6	849.2	850.3	851.4
15°	836.7	833.3	840.1	842.4	842.4
17.5°	823.1	820.8	827.6	829.9	832.2
20°	808.4	807.2	815.2	817.4	819.7
22.5°	791.4	791.4	799.3	801.6	806.1
25°	773.2	772.1	782.3	786.8	790.2
27.5°	752.8	752.8	764.1	769.8	773.2
30°	730.1	732.4	743.7	750.5	755.1
32.5°	707.5	709.7	723.3	731.3	736.9
35°	682.5	685.9	700.7	709.7	716.5
37.5°	655.3	661.0	676.8	687.0	695.0
40°	629.2	633.8	651.9	663.2	672.3
42.5°	599.7	607.7	625.8	639.4	649.6
45°	569.1	578.2	598.6	615.6	629.2
47.5°	537.4	548.7	570.3	592.9	606.6
50°	504.5	517.0	541.9	569.1	582.7
52.5°	471.6	485.2	512.5	544.2	558.9
55°	436.5	452.4	484.1	518.1	534.0
57.5°	400.2	418.4	454.6	493.2	509.0
60°	363.9	383.2	426.3	464.8	483.0
62.5°	326.5	348.1	394.5	438.8	455.8
65°	284.6	311.8	363.9	410.4	428.6
67.5°	246.0	274.4	334.5	380.9	400.2
70°	207.5	240.4	303.8	350.3	368.5
72.5°	168.9	207.5	269.8	317.4	327.7
75°	132.6	173.5	237.0	258.5	249.4
77.5°	97.5	142.9	199.5	188.2	185.9
80°	69.2	113.4	136.0	137.2	140.6
82.5°	44.2	83.9	88.4	89.6	90.7
85°	24.9	41.9	46.5	43.1	40.8
87.5°	11.3	13.6	11.3	7.9	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)